

REMARKS/ARGUMENTS

Favorable reconsideration of this application in view of the above amendments and in light of the following discussion is respectfully requested.

Claims 14-30 and 32-34 are pending. Claim 1 is amended, Claim 31 is cancelled without prejudice or disclaimer, and Claims 32-34 are newly submitted. No new matter is introduced.¹

The Office Action objected to Claim 31 under 37 C.F.R. § 1.75(c) for being of improper dependent form for failing to further limit the subject matter of the previous claim. In addition, Claims 14-31 were rejected under 35 U.S.C. § 102(b) as anticipated by Schmid (U.S. Patent No. 6,669,588).

With respect to the objection to Claim 31, this claim is canceled without prejudice or disclaimer. Accordingly, it is respectfully requested that the objection to Claim 31 be withdrawn.

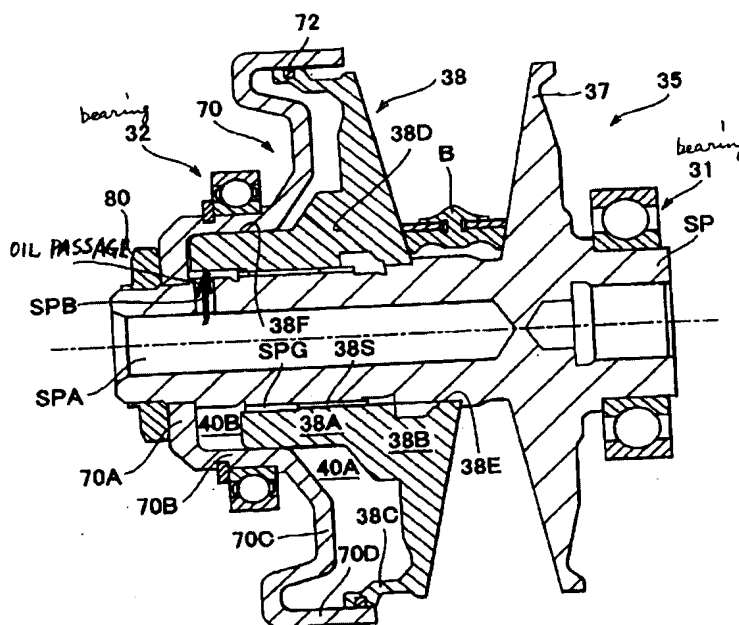
Claim 1 relates to a belt type continuously variable transmission. Claim 1 recites, *inter alia*, a pulley shaft that is supported by a first bearing and a second bearing that are spaced apart from each other in an axial direction of the pulley shaft and a supply oil passage that supplies hydraulic fluid to a pulley hydraulic chamber and includes a radial direction oil passage that extends in the pulley shaft in a radial direction of the pulley shaft. The radial direction oil passage is formed in the pulley shaft *outside of* a portion of the pulley shaft that is between the first bearing and the second bearing with respect to the axial direction of the pulley shaft. Amended Claim 1 further recites that the portion of the pulley shaft that is

¹ Support for amended Claim 1 can be found at least at paragraphs [0006]-[0007] and Figures 2-3 of the original disclosure, for example; and support for new Claims 32-34 can be found at least paragraphs [0032]-[0034] and [0040]-[0042], for example.

between the first bearing and the second bearing with respect to the axial direction of the pulley shaft is *free of any oil passages that extend in the radial direction of the pulley shaft*.

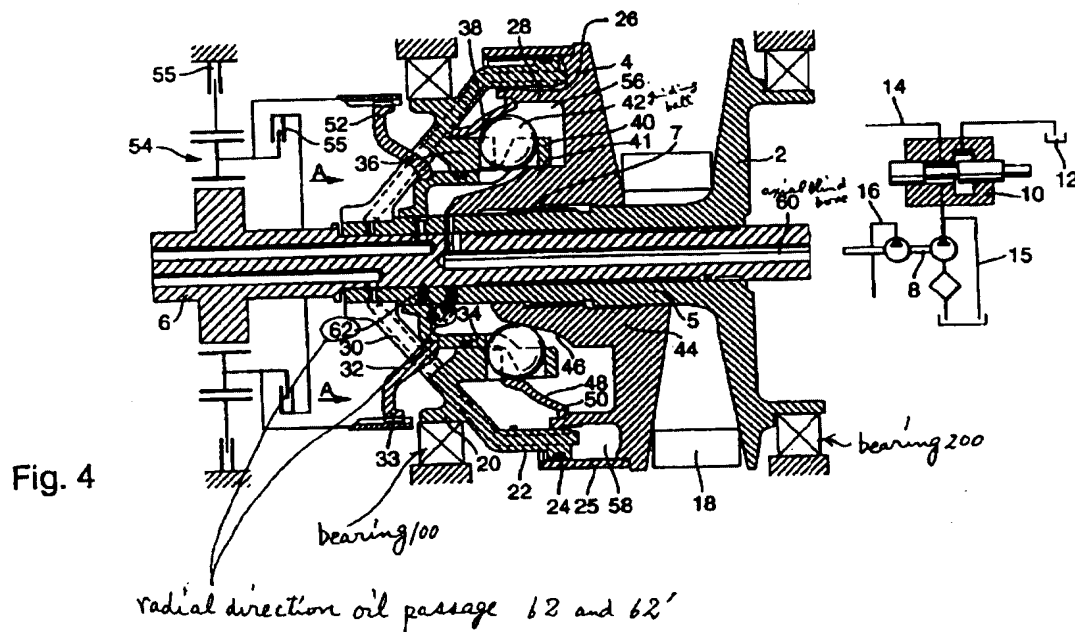
This amendment is fully supported by the specification as originally filed. For example, although not to be construed as limiting, Figure 2 of the present application, reproduced below and annotated for clarity, illustrates a radial direction oil passage for supplying the hydraulic fluid to the pulley hydraulic chamber is formed on *the outside of* the area between the two positions which are apart from each other and at which the bearings are provided. As discussed at paragraph [0007] of the specification as originally filed, for example, in this configuration a portion in which the radial direction oil passage of the pulley shaft is formed *does not directly receive a load applied by the belt*. Accordingly, concentration of stress on the radial direction oil passage does not occur, and the strength of the pulley shaft can be secured.

FIG. 2



Turning to the applied reference, Figure 4 of Schmid illustrates a continuously variable transmission that includes an input shaft 6, a radially inner contact pressure chamber 56 and a radially outer adjustment chamber 58. Schmid describes that the contact pressure chamber 56 is supplied with hydraulic medium pressure through an axial blind bore 60 in drive shaft 6 and radial bores. A radial bore serves as a return opening 62, is supplied with the pressure within contact pressure chamber 56 from within the annular ring 36 and opens into a further axial blind bore in drive shaft 6.

The Office Action identifies the blocks with X's in Figure 4 of Schmid as the claimed first and second bearing. As can be seen in Figure 4 of Schmid, reproduced below with annotations for clarity, the shaft 6 includes at least one radial bore (for example, the radial direction oil passages 62 and 62') that is that is in communication with the blind bore 60 and that is *between the blocks with X's*.



Therefore, even if the blocks with X's in Figure 4 of Schmid are identified as the claimed first and second bearings, Schmid fails to disclose a portion of a pulley shaft that is between the claimed first bearing and the claimed second bearing with respect to an axial direction of the pulley shaft that is *free of any oil passages that extend in the radial direction of the pulley shaft*.

Moreover, unlike the present application, Schmid fails to recognize the detrimental stress concentrations that can occur when radial direction oil passages are located between two spaced-apart support bearings. Thus, unlike the claimed configuration, the radial direction oil passages 62 and 62' of Schmid *directly receive a load applied by the belt*. Indeed, Schmid fails to provide any apparent reason to modify the configuration of oil passages disclosed therein to achieve the claimed configuration.

Accordingly, Schmid fails to disclose or suggest all of the features of amended independent Claim 1. It is submitted that Claim 1 and the claims depending therefrom are in condition for allowance.

New Claims 32-34 depend from Claim 1 and recite further features that are not disclosed or suggested by Schmid. For example, Claim 32 recites that the radial direction oil passage is in fluid communication with a movable sheave oil passage *via a spline portion* such that a hydraulic fluid supplied by the supply oil passage to the pulley hydraulic chamber passes through the radial direction oil passage, *the spline portion*, and the movable sheave oil passage; Claim 33 recites that the spline portion of the pulley shaft *permits fluid communication between* a radial direction oil passage and a movable sheave oil passage; and Claim 34 recites that a radial direction oil passage is in fluid communication with the movable sheave oil passage *via the spline groove portion*. The Office Action identifies

element 7 in Figure 4 of Schmid as the claimed spline portion. However, Schmid fails to disclose or suggest that the spline portion 7 permits the passage of hydraulic fluid in the manner recited in any of Claims 32-34.

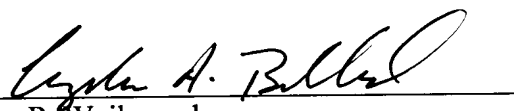
Accordingly, Schmid fails to disclose or suggest all of the features of new Claims 32-34. It is submitted that new Claims 32-34 are in condition for allowance.

For the reasons discussed above, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. Therefore, a Notice of Allowance for Claims 14-30 and 32-34 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Steven P. Weihrouch
Attorney of Record
Registration No. 32,829

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 08/07)

Christopher A. Bullard
Registration No. 57,644